



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,450	10/23/2003	Scott Hanggie	003797.00704	6405
28319 7590 04/08/2008 BANNER & WITCOFF, LTD. ATTORNEYS FOR CLIENT NOS. 003797 & 013797 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051				
EXAMINER				
AMIN, JWALANT B				
ART UNIT		PAPER NUMBER		
2628				
MAIL DATE		DELIVERY MODE		
04/08/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/691,450

**Applicant(s)**

HANGGIE ET AL.

**Examiner**

JWALANT AMIN

**Art Unit**

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 3, 4, 23 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-22 and 25-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 6/16/2006, 3/7/2005, 10/23/2003.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_



**DETAILED ACTION**

***Election/Restrictions***

1. This application contains claims directed to the following patentably distinct species:

- I. Species of Fig. 5, which is distorting content on top of which rendering of the window having a frame portion with specific properties.
- II. Species of Fig. 2, which is a method for performing desktop window compositing.

Figure 2 describes to resize the frame mesh in step 215, but nowhere does it suggest rendering the frame portion on top of the distorted content. Figure 5 does not represent the limitation of receiving application content information originating from an instance of a legacy application program, stripping out application content from the legacy window content, and converting the application content to a graphical representation of the application content. Thus, figure 2 and figure 5 represent mutually exclusive species.

2. The species are independent or distinct because claims to the different species recite the mutually exclusive characteristics of such species. In addition, these species are not obvious variants of each other based on the current record.

3. There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would

not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

4. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1 and 21 are generic.

5. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

6. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

7. Applicant's election of species of Fig. 2 corresponding to claims 1, 2, 5-22 and 25-48 in the reply filed on 12/18/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

8. Claims 3-4 and 23-34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

***Claim Rejections - 35 USC § 101***

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 21-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

11. Regarding claims 21-40, the language of the claim raise questions as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Specifically, the computer-readable media, as disclosed in claim 21 and described on page 8-9 of the specification, in the context of this disclosure covers carrier waves and modulated data signal, which are not a Manufacture within the meaning of 101. See MPEP 2106.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1, 5-16, 19 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Mac OS X v 10.2 "Jaguar" (Mac OS X version 10.2 by Apple; release date August 24, 2002; hereinafter Jaguar).

Mac OS X version 10.2, released on August 24, 2002, is an updated version of Mac OS X version 10.1. The features incorporated in Mac OS X version 10.2 are demonstrated using references by David Morgenstern (Under the desktop: Prospecting for Quartz in Mac OS X;

<http://www.creativepro.com/story/feature/17439.html?origin=story>; August 22, 2002; pgs. 1-4; hereinafter Morgenstern), Apple (Apple Introduces "Jaguar," the Next Major Release of Mac OS X; <http://www.apple.com/pr/library/2002/jul/17jaguar.html>; July 17, 2002; pgs. 1-3), Moki (Aqua help in Nvidia GeForce 4 [Archive] – AppleInsider; <http://forums.appleinsider.com/archive/index.php/t-1122.html>; January 28, 2002; pg. 1), John Siracusa (Mac OS X 10.2 Jaguar; <http://arstechnica.com/reviews/os/macosex-10.2.ars/8>; September 5, 2002; pgs. 1-5; hereinafter Siracusa), Shawn Erickson (Screenshot PDF; <http://www.omnigroup.com/mailman/archive/macosex-talk/2002-July/071171.html>; July 30, 2002; hereinafter Erickson), and Torrey Lyons (Re: MacOS X; <http://www.xfree86.org/pipermail/forum/2003-July/003741.html>; July 9, 2003; hereinafter Lyons) to depict the features incorporated in Mac OS X version 10.2.

It should be noted that material published after the file date of an application referring to program released before file date can be used in art rejection. See In re Epstein 31 USPQ2d 1817.

14. Regarding claim 1, Jaguar teaches a computer implemented method for rendering a desktop window in a graphical user interface of an operating system shell, comprising receiving application content to display in a window in the graphical user interface (Quartz compositor takes information from the rendering component and writes it on the screen, Morgenstern: pg. 1 last paragraph); and displaying at least a portion of the application content in an opaque content portion of the window (fully opaque window with transparent sub-parts, Moki: sixth paragraph), the window having a translucent frame portion (transparent sub-parts such as title bars, shadows, etc., Moki: sixth paragraph; translucent title bars of inactive windows, Morgenstern: pg. 2 third paragraph).

15. Regarding claim 5, Jaguar teaches the receiving step comprises receiving application content information originating from an instance of a legacy application program (Carbon/Cocoa application) (picture window is a Carbon application which uses QuickDraw's drawing methods and text window is a Cocoa application which uses Quartz2D, Erickson: pg. 1 last two lines and pg. 2 first four paragraphs; QuickDraw handles text, vector graphics and bitmapped images, and then send them to the screen and output devices, Morgenstern: pg. 1 fourth paragraph; QuickDraw is a legacy API from classic Mac OS, Lyons: pg. 1; all of the bitmapped data produced by Quartz 2D, QuickDraw, QuickTime, and OpenGL is passed on to the Quartz Compositor for eventual display on the screen, Siracusa: pg. 1 seventh paragraph, pg. 3 second paragraph and figure on pg. 3 and 4).



16. Regarding claim 6, Jaguar teaches the receiving comprises a compositing desktop window manager (CDWM) (Quartz 2D and Quartz compositor) receiving the application content (Morgenstern: pg. 1 last paragraph, pg. 3 third and fourth paragraphs; Siracusa: pg. 1 seventh paragraph, pg. 2 last line, pg. 3 first five lines and figure on pg. 3 and 4).

17. Regarding claim 7, Jaguar teaches the CDWM modeling the window by applying a texture to a mesh (window/polygon) (it should be noted that a mesh according to the specification is 2D or 3D primitive, see paragraph [0015] on pg. 15; it should be further noted that each window is treated as an OpenGL surface and the texture is mapped onto that surface, Siracusa: pg. 3 second paragraph and pg. 4 first five lines) (the window server, now an OpenGL application itself, retains the resulting bitmaps as textures on polygons in an OpenGL scene and composites them into a pleasing, cohesive final image on the screen, Siracusa: pg. 3 second paragraph).

18. Regarding claim 8, Jaguar teaches the mesh is defined by a current visual style (each window is drawn according to its position and layering; each window is represented as a bitmap that includes alpha channel and anti-aliasing information; thus the position and layering of each window will give its current alpha channel information, which defines its current visual style; Siracusa: pg. 1 last paragraph).

19. Regarding claim 9, Jaguar teaches the mesh is provided in the application content information (each window and its associated bitmap is provided to the Quartz compositor; Siracusa: pg. 1 last two paragraphs, pg. 3 second paragraph and pg. 4 first five lines).

20.....Regarding claim 10, Jaguar teaches the texture is defined by a current visual style (each window is drawn according to its position and layering; each window is represented as a bitmap that includes alpha channel and anti-aliasing information; the bitmap that makes up the window's contents is the texture mapped on that surface; thus the position and layering of each window and it's associated bitmap texture will give its current alpha channel information, which defines its current visual style; Siracusa: pg. 1 last paragraph, pg. 3 second paragraph and pg. 4 first five lines).

21.....Regarding claim 11, Jaguar teaches the texture is provided in the application content information (each window is drawn according to its position and layering; each window and it's associated bitmap texture is provided to the Quartz compositor to composite them into a pleasing, cohesive final image on the screen; Siracusa: pg. 1 last two paragraphs, pg. 3 second paragraph and pg. 4 first five lines).

22.....Regarding claim 12, Jaguar teaches the instance of the legacy application program (Carbon/Cocoa application) providing legacy window content to a legacy desktop window manager (QuickDraw); stripping out application content from the legacy window content (QuickDraw receives the picture content from the picture window of the Carbon application, Erickson: pg. 1 last two lines and pg. 2 first three lines); and converting the application content to a graphical representation of the application content (QuickDraw generates the graphical representation of the application data using it's drawing methods; picture window is a Carbon application which uses QuickDraw's drawing methods and text window is a Cocoa application which uses Quartz2D, Erickson: pg. 1 last two lines and pg. 2 first four paragraphs; QuickDraw handles text,

vector graphics and bitmapped images, and then send them to the screen and output devices, Morgenstern: pg. 1 fourth paragraph; QuickDraw is a legacy API from classic Mac OS, Lyons: pg. 1).

23.....Regarding claim 13, Jaguar teaches switching between the CDWM and the legacy DWM as a default desktop window manager (Cocoa application that uses Quartz 2D does not provide all the needed functionality, so there is a switching between Quartz and QuickDraw for some things, Lyons: pg. 1; picture window is a Carbon application which uses QuickDraw's drawing methods and text window is a Cocoa application which uses Quartz2D, Erickson: pg. 1 last two lines and pg. 2 first four paragraphs).

24.....Regarding claim 14, Jaguar teaches the legacy DWM redirects the application content to the CDWM (all of the bitmapped data produced by QuickDraw is passed on to the Quartz Compositor for eventual display on the screen, Siracusa: pg. 1 seventh paragraph, figure on pg. 3 and 4).

25.....Regarding claim 15, Jaguar teaches the switching is based on the current visual style (Quartz compositor composites all of the visible window bitmaps with each other according to their position and layers; each window bitmap includes alpha channel and anti-aliasing information, Siracusa: pg. 1 last two paragraphs; pixels displayed belong to one window or the desktop and switch immediately when moving from one window to another, Morgenstern: pg. 2 paragraph two; the front application switches the cursor in response to mousing over an area receiving an mouse moved event and telling the window server to change the cursor; Cocoa NSView's can be set to use a certain cursor image whenever the cursor is over them; Cocoa application that uses Quartz 2D does

not provide all the needed functionality, so there is a switching between Quartz and QuickDraw for some things based on the current visual style of the area over which mouse is moved, Lyons: pg. 1 and pg. 2 last paragraph).

26.....Regarding claim 16, Jaguar teaches the switching is based on a current configuration of a computer on which the method is being performed (Quartz compositor composites all of the visible window bitmaps with each other according to their position and layers; each window bitmap includes alpha channel and anti-aliasing information, Siracusa: pg. 1 last two paragraphs; pixels displayed belong to one window or the desktop and switch immediately when moving from one window to another, Morgenstern: pg. 2 paragraph two; the front application switches the cursor in response to mousing over an area receiving an mouse moved event and telling the window server to change the cursor; Cocoa NSView's can be set to use a certain cursor image whenever the cursor is over them; Cocoa application that uses Quartz 2D does not provide all the needed functionality, so there is a switching between Quartz and QuickDraw for some things based on the current visual style of the area over which the mouse was moved; the visual style of this area is the visual configuration of the computer on which the method is being performed, Lyons: pg. 1 and pg. 2 last paragraph).

27.....Regarding claim 19, Jaguar teaches the frame portion is translucent when the window has an input focus (Moki teaches that title bar attached to the window has a level of transparency associated with them, so even a fully opaque window has transparent sub-parts such as the title bar, Moki: paragraph five and six).

28. Regarding claim 44, Jaguar teaches the instance of the legacy application program (Carbon/Cocoa application) providing legacy window information to a legacy desktop window manager (QuickDraw); stripping out client content from the legacy window information (QuickDraw receives the picture content from the picture window of the Carbon application, Erickson: pg. 1 last two lines and pg. 2 first three lines); converting the client content to raster image of the client content (QuickDraw generates the graphical representation of the application data using it's drawing methods; picture window is a Carbon application which uses QuickDraw's drawing methods and text window is a Cocoa application which uses Quartz2D, Erickson: pg. 1 last two lines and pg. 2 first four paragraphs; QuickDraw handles text, vector graphics and bitmapped images, and then send them to the screen and output devices, Morgenstern: pg. 1 fourth paragraph; QuickDraw is a legacy API from classic Mac OS, Lyons: pg. 1), a compositing desktop window manager (CDWM) (Quartz 2D and Quartz compositor) drawing a window to a buffer memory (Siracusa: pg. 1 last paragraph, pg. 2 first two paragraphs and figure on pg. 3), wherein the CDWM renders the window by applying a texture to a mesh (window/polygon) (it should be noted that a mesh according to the specification is 2D or 3D primitive, see paragraph [0015] on pg. 15; it should be further noted that each window is treated as an OpenGL surface and the texture is mapped onto that surface, Siracusa: pg. 3 second paragraph and pg. 4 first five lines) (the window server, now an OpenGL application itself, retains the resulting bitmaps as textures on polygons in an OpenGL scene and composites them into a pleasing, cohesive final image on the screen, Siracusa: pg. 3 second paragraph), and wherein the

texture comprises the raster image (bitmap) of the client content and the default non-client information (bitmap includes translucency and anti-aliasing information, Siracusa: pg. 1 last paragraph, pg. 2 first two paragraphs, pg. 3 second paragraph, pg. 4 first paragraph).

***Claim Rejections - 35 USC § 103***

29.....The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Formatted: Bullets and Numbering

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30..... Claims 21, 25-36 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaguar.

Formatted: Bullets and Numbering

31.....Regarding claim 21, the statements presented above with respect to claim 1 are incorporated herein.

Although Jaguar teaches the limitations as stated above in claim 1, Jaguar does not explicitly teach a computer readable medium storing computer executable instructions that cause a computer to perform a method of rendering a desktop window in a graphical user interface of an operating system. However, the examiner takes an official notice of the fact that it was known to one of ordinary skill in art at the time of present invention to execute a programmable process stored on use a computer readable medium because by using a portable computer readable medium to store a

process that can be executed by the computer allows to perform the execution of the process on any computer and therefore provides portability and reusability.

Formatted: Bullets and Numbering

32. Regarding claim 25, the statements presented above with respect to claims 21 and 5 are incorporated herein.

33. Regarding claim 26, the statements presented above with respect to claims 21 and 6 are incorporated herein.

34. Regarding claim 27, the statements presented above with respect to claims 21 and 7 are incorporated herein.

35. Regarding claim 28, the statements presented above with respect to claims 21 and 8 are incorporated herein.

36. Regarding claim 29, the statements presented above with respect to claims 21 and 9 are incorporated herein.

37. Regarding claim 30, the statements presented above with respect to claims 21 and 10 are incorporated herein.

38. Regarding claim 31, the statements presented above with respect to claims 21 and 11 are incorporated herein.

39. Regarding claim 32, the statements presented above with respect to claims 21 and 12 are incorporated herein.

40. Regarding claim 33, the statements presented above with respect to claims 21 and 13 are incorporated herein.

41. Regarding claim 34, the statements presented above with respect to claims 21 and 14 are incorporated herein.

42. Regarding claim 35, the statements presented above with respect to claims 21 and 15 are incorporated herein.

43. Regarding claim 36, the statements presented above with respect to claims 21 and 16 are incorporated herein.

44. Regarding claim 39, the statements presented above with respect to claims 21 and 19 are incorporated herein.

45. Claims 18, 38 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaguar, and further in view of Solazzi (US 2003/0107570).

46. Regarding claim 18, although Jaguar teaches the limitations as stated above, Jaguar does not explicitly teach the frame comprises reflective content based on other content in the graphical user interface separate from the window. However, Solazzi teaches a 3D image (window frame) can reflect the surroundings (other content in the graphical user interface separate from the window) ([0008]). Therefore, it would have been obvious to one of ordinary skill in art at the time of present invention to have 3D images with reflective characteristics as taught by Solazzi and apply into Jaguar because such reflective characteristics illustrate the ability of the object to reflect light ([0008]).

47. Regarding claim 38, the statements presented above with respect to claims 21 and 18 are incorporated herein.

48. Regarding claim 42, the statements presented above with respect to claims 1 and 18 are incorporated herein.

Formatted: Bullets and Numbering



49. Regarding claim 43, although Jaguar teaches the limitations as stated above, Jaguar does not explicitly teach rendering refractive content on the frame portion based on the other discrete content behind the window in the graphical user interface. However, Solazzi teaches a 3D image (window frame) can display refractive characteristics ([0008]). Therefore, it would have been obvious to one of ordinary skill in art at the time of present invention to have 3D images with refractive characteristics as taught by Solazzi and apply into Jaguar because refractive properties added to the 3D image makes the image appear more realistic ([0014]).

50. Claims 17, 37 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaguar, in view of Solazzi, and further in view of Whitman (Technology Terminology, Mike Whitman, May 13, 2001, <http://web.archive.org/web/20010513215002/http://bigelowmiddleschool.com/programs/Teched/techterms.html>).

Formatted: Bullets and Numbering

51. Regarding claim 17, although Jaguar teaches the limitations as stated above, Jaguar does not explicitly teach the frame comprises spectral highlights based on a virtual light source. However, Solazzi teaches a 3D image (window frame) can reflect the surroundings ([0008]; it should be noted that Whitman defines spectral highlight as a bright reflection from a light source containing little or no detail; Solazzi teaches a 3D image can display reflective characteristics, and therefore the reflective characteristics of the 3D image of Solazzi also includes spectral highlights which is a bright reflection from a light source). Therefore, it would have been obvious to one of ordinary skill in art

Art Unit: 2628

at the time of present invention to have 3D images with reflective characteristics as taught by Solazzi and apply into Jaguar because such reflective characteristics illustrate the ability of the object to reflect light ([0008]).

52. Regarding claim 41, the statements presented above with respect to claims 1 and 17 are incorporated herein.

53. Claims 2 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaguar, and further in view of Donham et al (US 6980209; hereinafter Donham).

Formatted: Bullets and Numbering

54. Regarding claim 2, Jaguar teaches distorting content on top of which the frame portion is rendered (window can have shadow and a title bar; the shadow and title bar has a level of transparency associated with them, Moki: paragraph six and seven; contents underneath the translucent title bars of inactive windows can be seen, Morgenstern: pg. 2 paragraph three and fig. 1 and it's description; it when a title bar is translucent, blending needs to be performed on the title bar and contents of another window underneath the translucent title bar).

Although Jaguar teaches the limitations as stated, Jaguar does not explicitly teach a pixel shader is needed to perform the blending. However, Donham teaches a pixel shader that blends the texels with the color values of the pixels to be textured (col. 5 lines 25-35). Therefore, it would have been obvious to one of ordinary skill in art at the time of present invention to use a pixel shader to perform blending as taught by Donham into the method of Jaguar because a pixel shader combines pixel data and texture data to produce the combined pixel data (col. 5 lines 25-31).

55. Regarding claim 22, the statements presented above with respect to claims 21 and 2 are incorporated herein.

Formatted: Bullets and Numbering

56. Claims 20, 40 and 45-48 rejected under 35 U.S.C. 103(a) as being unpatentable over Jaguar, in view of Farrah (US 2004/0030997), and further in view of Meagher (US 4694404).

Formatted: Bullets and Numbering

57. Regarding claims 20, 40 and 45-47, Jaguar teaches the limitations as stated above, except that Jaguar does not explicitly teach receiving user input to resize the window and dividing the mesh into the three regions per mesh dimension. However, Farrah teaches to resize the window by dividing it into several equally sized and not equally sized regions based on the user input (fig. 21a-c, fig. 22a-c, [0225-0227], [0231-0235]; it should be noted that selecting the number of rows as "3" will divide the window in nine equal-sized regions). Therefore, it would have been obvious to one of ordinary skill in art at the time of present invention to divide a window mesh into several regions as taught by Farrah and apply it into the method of Jaguar because such regions are commonly used in computer programs which are used to generate artworks, drawings and flow charts ([0006]).

Although the combination of Jaguar and Farrah teach the limitations as stated above, they do not explicitly teach for each region, maintaining offsets of mesh vertices in any dimension by which the region is bounded by a bounding box of the window, and scaling mesh vertices in any dimension by which the region is not bounded by the bounding box of the window. However, Meagher shows offsets (maintaining offsets of

mesh vertices) from each line correspond to vertices of each of the four windows, and the critical vertices for a window overlay selected from 3 x 3 array may be calculated by adding offsets (scaling the vertices) as a function of the value in x and y directions (fig. 6a-f, fig. 23a-e, col. 8 lines 31-51, col. 58 lines 64-67, col. 59 lines 1-15, col. 60 lines 3-21 and lines 56-67, col. 61 lines 1-17). Therefore, it would have been obvious to one of ordinary skill in art at the time of present invention to scale the vertices as taught by Meagher and apply it into the method of Jaguar and Farrah because such a method scales the three-dimensional universe relative to the three-dimensional coordinate system using the independent scaling factors for each of the x, y and z directions input by floating point multiplication on the microcomputer (col. 60 lines 56-60).

58. Regarding claim 48, although the combination of Jaguar and Farrah teach the limitations as stated above, they do not explicitly teach regions bounded by the bounding box are as small as necessary to encompass material that should not be scaled. However, Meagher teaches the bounding box of the node projection is the same size or smaller (in each dimension) as a window at that level depending on the size of the node projection as determined by the user specified scale factor (the size of the bounding box depends on the scale factor determined by the use, col. 44 lines 57-67, col. 45 lines 1-5). Therefore, it would have been obvious to one of ordinary skill in art at the time of present invention to have the bounding box size is determined by the scale factor as taught by Meagher and apply it into the method of Jaguar and Farrah because it helps to determine if the node projection intersects any non-full window in the current window overlay (col. 45 lines 6-10).

Formatted: Bullets and Numbering

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JWALANT AMIN whose telephone number is (571)272-2455. The examiner can normally be reached on 9:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman can be reached on 571-272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. A./  
Examiner, Art Unit 2628

/Mark K Zimmerman/  
Supervisory Patent Examiner, Art Unit 2628